

**REMARKS**

Claims 1, 2, 4, 5 and 8 are pending in this application. By this Amendment, claims 1 and 2 are amended. No new matter is added by these amendments, as support can be found in at least Fig. 6A and paragraph [0092] of Applicant's disclosure. Claim 6 is canceled without prejudice to, or disclaimer of, the subject matter recited in this claim. Reconsideration of the application based upon the above amendments and the following remarks is respectfully requested.

The Office Action, in paragraph 3, rejects claims 1, 4 and 5 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application Publication No. 2003/0197598 to Hayashi in view of U.S. Patent No. 6,111,289 to Udrea, and further in view of U.S. Patent Application Publication No. 2003/0102534 to Huang, and further in view of U.S. Patent No. 4,126,713 to DiBuganara. Additionally, the Office Action, in paragraph 6, rejects claims 2 and 8 under 35 U.S.C. §103(a) as being unpatentable over Hayashi in view of U.S. Patent No. 6,049,109 to Omura et al. (hereinafter "Omura") and further in view of U.S. Patent Application Publication No. 2003/0137284 to DiPiazza and further in view of "Solid State Electronic Devices" by Streetman, in view of Huang, and further in view of DiBuganara. The Office Action, in paragraph 8, rejects claim 6 under 35 U.S.C. §103(a) as being unpatentable over Udrea, in view of Huang and further in view of DiBuganara, and further in view of U.S. Patent Application Publication No. 2003/0071291 to Beasom and further in view of U.S. Patent No. 6,055,460 to Shopbell, and further in view of U.S. Patent No. 6,187,684 to Farber et al. (hereinafter "Farber"). The Applicant traverses these rejections.

The Office Action asserts that some combination of the prior art references teach the features as recited in at least independent claims 1 and 2. The prior art references, as enumerated above, do not teach the p-type silicon layer being surrounded by the n-type silicon layer, as positively recited in amended claim 1, and illustrated in Fig. 6A of Applicant's

disclosure. None of the applied prior art references teach both the p-type and the n-type silicon layer being disposed on an insulating substrate where the p-type silicon layer is surrounded by the n-type silicon layer.

Additionally, the applied prior art references do not teach the p-type silicon layer, the intrinsic silicon layer and the n-type silicon layer being disposed on the insulating substrate, the intrinsic silicon layer being surrounded by the n-type silicon layer, and the p-type silicon layer being surrounded by the intrinsic silicon layer, as positively recited in amended claim 2, and discussed in at least paragraph [0092] of Applicant's disclosure. The applied prior art references are silent with respect to this specific feature.

The cancellation of claim 6 makes the rejection of this claim moot.

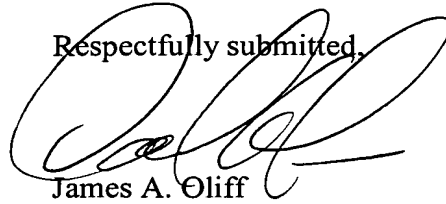
For at least the above reasons, the applied prior art references as enumerated above, cannot reasonably be considered to teach, or to have suggested, the combinations of all of the features as recited in at least independent claims 1 and 2. Further, claims 4, 5 and 8 would also not have been suggested by the applied prior art references for at least the respective dependence of these claims on allowable independent claims 1 and 2, as well as for the separately patentable subject matter that each of these claims recites.

Accordingly, reconsideration and withdrawal of the rejections of claims 1, 2, 4, 5 and 8 under 35 U.S.C. §103(a) as being unpatentable over some combination of the applied prior art references are respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 2, 4, 5 and 8 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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